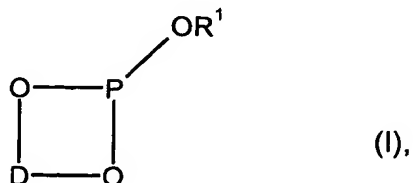


IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) Process for preparing compounds of the formula (I)



where

D is an unsubstituted or substituted 1,1'-biphenyl-2,2'-diyl- or 1,1'-binaphthyl-2,2'-diyl radical and

R¹ is a radical selected from the group of C₁-C₁₂-alkyl, C₂-C₁₂-alkenyl, C₁-C₁₂-halogenalkyl, C₅-C₁₅-arylalkyl and C₄-C₁₄-aryl, with the proviso that

R¹ has a molar mass of 215 or less,

comprising

in a step a) reacting

- compounds of the formula (II),



where Hal is in each case independently chlorine, bromine or iodine,

- with compounds of the formula (III),



where

R^1 is as defined above

to give compounds of the formula (IV)



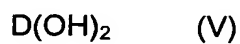
where

R^1 and Hal are each as defined above,

in a step b) distillatively purifying
the compounds of the formula (IV) of a) and

in a step c), reacting
the compounds of the formula (IV), purified in step b)

with compounds of the formula (V)



where

D is as defined above

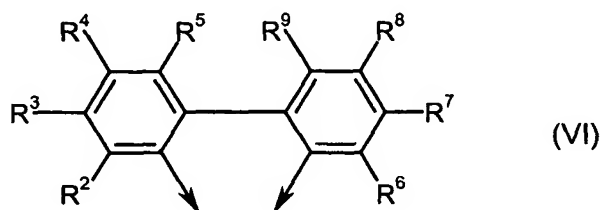
to give compounds of the formula (I).

2. (Original) Process according to Claim 1, characterized in that step c) is carried out in the presence of a base.

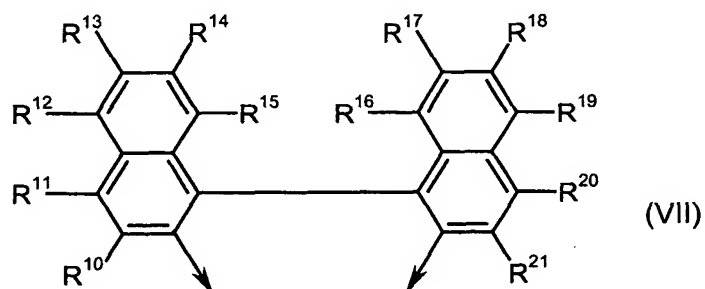
3. (Currently Amended) Process according to ~~at least~~ Claim 1, characterized in that R¹ is a radical which is selected from the group of C₁-C₈-alkyl, C₅-C₁₅-arylalkyl and C₄-C₁₄-aryl, with the proviso that

R¹ has a molar mass of 200 or less.

4. (Original) Process according to Claim 1, characterized in that D is an unsubstituted or substituted 1,1'-biphenyl-2,2'-diyl radical of the formula (VI)



or is an unsubstituted or substituted 1,1'-binaphthyl-2,2'-diyl radical of the formula (VII)



where the radicals

R² to R²⁰ are in each case independently selected from the group of hydrogen, fluorine, chlorine, bromine, cyano, protected hydroxyl, C₁-C₁₂-alkyl, C₁-C₁₂-halogenalkyl, C₁-C₁₂-alkoxy, C₁-C₈-alkylthio, free or protected formyl, C₄-C₁₄-aryl, tri(C₁-C₈-alkyl)siloxy or radicals of the formula (VIII)

where, each independently,

A is absent or is a C₁-C₈-alkylene radical and

B is absent or is oxygen, sulphur or NR²¹

where

R²¹ is hydrogen, C₁-C₁₂-alkyl or C₄-C₁₄-aryl and

E is a carbonyl group and

F is R²², OR²², NHR²³ or NR²³R²⁴

where

R²² is C₁-C₁₂-alkyl or C₆-C₁₀-aryl and

R²³ and R²⁴ are each independently C₁-C₈-alkyl or C₄-C₁₄-aryl, or NR²³R²⁴ together is a cyclic amino radical having 4 to 12 carbon atoms, and in each case two adjacent radicals from R² to R²⁰ together optionally form a nonaromatic ring and in each case two of the radicals from R² to R²⁰ optionally are bridging.

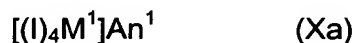
5. (Currently Amended) Process according to Claim 1, characterized in that enationmerically enriched compounds of the formula (V) are used.
6. (Original) Process according to Claim 1, characterized in that the compounds of formula (I) are selected from the group consisting of :

((S)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)isopropyl phosphite
 ((R)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)isopropyl phosphite
 ((R)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)-(R)-1-phenylethyl phosphite
 ((R)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)-(S)-1-phenylethyl phosphite
 ((S)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)-(R)-1-phenylethyl phosphite
 ((S)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)-(S)-1-phenylethyl phosphite
 ((S)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)cyclohexyl phosphite
 ((R)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)cyclohexyl phosphite
 ((S)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)phenyl phosphite
 ((R)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)phenyl phosphite
 ((S)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)-2,6-dimethylphenyl phosphite
 ((R)-5,5'-dichloro-6,6'-dimethoxy-1,1'-biphenyl-2,2'-diyl)-2,6-dimethylphenyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-isopropyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-isopropyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-(rac)-1-phenylethyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-(rac)-1-phenylethyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-(S)-1-phenylethyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-(S)-1-phenylethyl phosphite

((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-(R)-1-phenylethyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-(R)-1-phenylethyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-diphenylmethyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-diphenylmethyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)methyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)methyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-2,6-dimethylphenyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-2,6-dimethylphenyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-2,6-diisopropylphenyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-2,6-diisopropylphenyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)phenyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)phenyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)ethyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)ethyl phosphite
 ((S)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-4-tert-butylphenyl phosphite
 ((R)-5,5',6,6'-tetramethyl-3,3'-bis(tert-butyl)-1,1'-biphenyl-2,2'-diyl)-4-tert-butylphenyl phosphite

((S)-1,1'-binaphthyl-2,2'-diyl)isopropyl phosphite
 ((R)-1,1'-binaphthyl-2,2'-diyl)isopropyl phosphite
 ((S)-1,1'-binaphthyl-2,2'-diyl)neopentyl phosphite
 ((R)-1,1'-binaphthyl-2,2'-diyl)neopentyl phosphite
 ((S)-1,1'-binaphthyl-2,2'-diyl)phenyl phosphite
 ((R)-1,1'-binaphthyl-2,2'-diyl)phenyl phosphite
 ((S)-1,1'-binaphthyl-2,2'-diyl)benzyl phosphite and
 ((R)-1,1'-binaphthyl-2,2'-diyl)benzyl phosphite.

7. (Original) Process according to Claim 1, characterized in that the distillation in step b) is carried out a pressure from 0.001 to 1000 hPa.
8. (Currently Amended) Process according to Claim 1, further comprising as step d), reacting the compounds of the formula (I) obtained in steps a) to c) with transition metal compounds.
9. (Original) Process according to Claim 8, characterized in that solutions of compounds of the formula (I), as obtained in step c), are used directly in step d), optionally after removing precipitates.
10. (Original) Process according to Claim 8, characterized in that solutions of compounds of the formula (I), as obtained in step c), are concentrated, optionally after removing precipitates, the compounds of the formula (I) are taken up again in solvents and subsequently provided for reaction in step d).
11. (Original) Process according to Claim 8, characterized in that transition metal compounds containing compounds of the formula (I) are those of the formula (Xa),



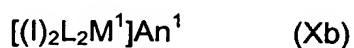
where

(I) is in each case independently, a compound of the formula (I) and

M¹ is rhodium or iridium and

An¹ is methanesulphonate, trifluoromethanesulphonate, tetrafluoroborate, hexafluorophosphate, perchlorate, hexafluoroantimonate, tetra(bis 3,5-trifluoromethylphenyl)borate or tetraphenylborate or

those of the formula (Xb)



where

(I) is in each case independently a compound of the formula (I) and

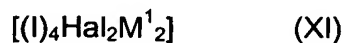
M¹ is rhodium or iridium and

An¹ is methanesulphonate, trifluoromethanesulphonate, tetrafluoroborate, hexafluorophosphate, perchlorate, hexafluoroantimonate, tetra(bis 3,5-trifluoromethylphenyl)borate or tetraphenylborate and

L is in each case a C₂-C₁₂-alkene, or

L₂ together is a (C₄-C₁₂)-diene and

those of the formula (XI)



where

(I) is in each case independently a compound of the formula (I) and

M¹ is rhodium or iridium and

Hal is chlorine, bromine or iodine or

those of the formula (XII)



where

(I) is in each case independently a compound of the formula (I) and

arene is a coordinated aromatic compound having 6 to 12 ring carbon atoms which is optionally substituted by up to 6 radicals which are each independently selected from the group of C₁-C₈-alkyl, benzyl and phenyl and

Hal is chlorine, bromine or iodine, or

those of the formula (XIII)

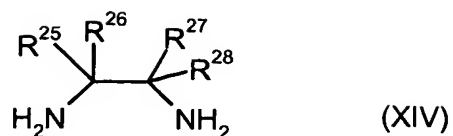


where

(I) is in each case independently a compound of the formula (I) and

Hal is chlorine, bromine or iodine,

(XIV) represents compounds of the formula (XIV)



where

R²⁵, R²⁶, R²⁷ and R²⁸ are each independently hydrogen, C₁-C₁₂-alkyl, C₄-C₁₄-aryl or C₅-C₁₅-arylalkyl radicals, or in each case two radicals together are a straight-chain or branched C₃-C₁₂-alkylene radical.

12. (Original) Transition metal complexes of the formula (Xa)



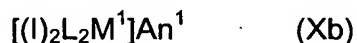
where

(I) is in each case independently a compound of the formula (I) as defined in Claim 1 and

M¹ is rhodium or iridium and

An¹ is methanesulphonate, trifluoromethanesulphonate, tetrafluoroborate, hexafluorophosphate, perchlorate, hexafluoroantimonate, tetra(bis 3,5-trifluoromethylphenyl)borate or tetraphenylborate.

13. (Original) Transition metal complexes of the formula (Xb)



where

(I) is in each case independently a compound of the formula (I) as defined in Claim 1 and

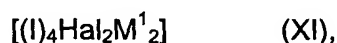
M¹ is rhodium or iridium and

An¹ is methanesulphonate, trifluoromethanesulphonate, tetrafluoroborate, hexafluorophosphate, perchlorate, hexafluoroantimonate, tetra(bis 3,5-trifluoromethylphenyl)borate or tetraphenylborate and

L is in each case a C₂-C₁₂-alkene, for example ethylene or cyclooctene, or a nitrile, , or

L₂ together is a (C₄-C₁₂)-diene,.

14. (Original) Transition metal complexes of the formula (XI)



where

(I) is in each case independently, a compound of the formula (I) as defined in Claim 1 and

M¹ is rhodium or iridium and

Hal is chlorine, bromine or iodine.

15. (Original) Transition metal complexes of the formula (XII)



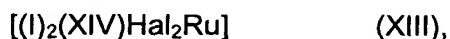
where

(I) is in each case independently a compound of the formula (I) as defined in Claim 1 and

arene is a coordinated aromatic compound having 6 to 12 ring carbon atoms which is optionally substituted by up to 6 radicals which are each independently selected from the group of C₁-C₈-alkyl, benzyl and phenyl.

Hal is chlorine, bromine or iodine.

16. (Currently Amended) Transition metal complexes of the formula (XIII)

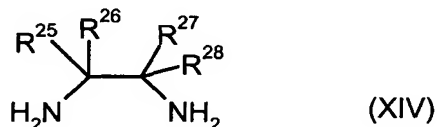


where

(I) is in each case independently, a compound of the formula (I) and

Hal is chlorine, bromine or iodine, and

(XIV) represents compounds of the formula (XIV)



where

R²⁵, R²⁶, R²⁷ and R²⁸ are each independently hydrogen, C₁-C₁₂-alkyl, C₄-C₁₄-aryl or C₅-C₁₅-arylalkyl, or in each case two radicals together are a straight-chain or branched C₃-C₁₂-alkylene radical.

17. (Original) A process for catalyzing reactions comprising providing transition metal complexes according to Claim 12 as catalysts.

18. (Original) A process for preparing stereoisomerically enriched compounds comprising providing transition metal complexes containing the compounds of the formula (I) which have been prepared according to Claim 8.
19. (Original) A process for preparing stereoisomerically enriched compounds comprising providing transition metal complexes containing the compounds of the formula (I) which have been prepared according to Claim 12.
20. (Currently Amended) Process for preparing stereoisomerically enriched compounds by asymmetric synthesis, comprising providing as catalysts transition metal complexes containing the compounds of the formula (I) which have been prepared according to Claim 8.-
21. (Original) Process for preparing stereoisomerically enriched compounds by asymmetric synthesis, comprising providing as catalysts transition metal complexes containing the compounds of the formula (I) which have been prepared according to Claim 12.